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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,866	03/25/2004	Jeffrey Beaver	20341-73966	6653

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EXAMINER

FERGUSON, MICHAEL P

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/808,866

Applicant(s)

BEAVER ET AL.

Examiner

Michael P. Ferguson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-24 is/are rejected.
- 7) ☒ Claim(s) 9 and 10 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 05/10/04, 10/04/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Objections

2. Claims 1, 4, 16 and 17 are objected to because of the following informalities:

Claim 1 (line 1) recites "comprising". It should recite --comprising: --.

Claim 4 (line 2) recites "the hinge plates". It should recite --the hinge members--.

Claim 16 (line 1) recites "The lock apparatus". It should recite --A lock apparatus--.

Claim 17 (line 3) recites "are in the unlocked". It should recite --are unlocked--.

For the purpose of examining the application, it is assumed that appropriate correction has been made.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1-8 and 11-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoo (US 4,890,950).

As to claim 1, Yoo discloses a lock apparatus comprising:

a lockable joint including first and second hinge members **100,100''** coupled together for rotation about an axis,

a lock **8,10** movable between a locking position in which the hinge members are locked to prevent the hinge members from rotating about the axis and a releasing position in which the hinge members are unlocked to permit the hinge members to rotate about the axis,

a knob **7** rotatable (relative to rotating hinge member **100''**) about the axis and movable along the axis, the lock moving from the locking position to the releasing position in response to movement of the knob axially toward the hinge members and then rotation (relative to rotating hinge member **100''**) of the knob about the axis, and

a lock indicator member **10'** mounted for movement along the axis between a first position and a second position in response to axial movement of the knob to allow a user to determine whether the hinge members are locked or unlocked by observing whether the lock indicator member is in the first position or the second position (Figures 2-5).

As to claim 2, Yoo discloses a lock apparatus wherein the lock indicator member **10'** is arranged to move from the first position to the second position in response to axial movement of the knob **7** toward the hinge members **100,100''** (Figure 3).

As to claim 3, Yoo discloses a lock apparatus wherein the lock indicator member **10'** is arranged to move from the first position when the hinge members **100,100''** are locked to the second position when the hinge members are unlocked in response to axial movement of the knob **7** toward the hinge members and then rotation (relative to rotating hinge member **100''**) of the knob about the axis (Figure 3).

As to claim 4, Yoo discloses a lock apparatus wherein the lockable joint includes a drive shaft **7'** rotatable (relative to rotating hinge member **100''**) about the axis, the hinge members **100,100''** are rotatably mounted on the drive shaft, and the lock **8,10** is coupled to the drive shaft for axial movement toward and away from the hinge members (Figure 3).

As to claim 5, Yoo discloses a lock apparatus wherein the drive shaft **7'** includes a bore receiving the lock indicator member **10'** for axial movement therein, the lock indicator member has a first end configured to engage the knob **7** (via drive shaft **7'**) when the knob is moved axially toward the hinge members **100,100''** and a second end, and the lock is mounted on the lock indicator member near the second end for axial movement therewith (Figure 3).

As to claim 6, Yoo discloses a lock apparatus wherein the lockable joint includes a cover **100'** and the second end of the lock indicator member **10'** extends through an opening in the cover when the hinge members **100,100''** are unlocked (Figure 3).

As to claim 7, Yoo discloses a lock apparatus wherein the second end of the lock indicator member **10'** retracts into the cover **100'** when the hinge members **100,100''** are locked (Figure 3).

As to claim 8, Yoo discloses a lock apparatus wherein the lockable joint includes a spring 13 biasing the lock toward the hinge members **100,100''** so that the second end of the lock indicator member **10'** retracts into the cover **100'** when the hinge members are locked (Figure 3).

As to claim 11, Yoo discloses a lock apparatus wherein the lockable joint includes a cam **9''** configured to move the lock **8,10** to the releasing position in response to movement of the knob axially toward the hinge members **100,100''** and then rotation (relative to rotating hinge member **100''**) of the knob **7** about the axis (Figure 3).

As to claim 12, Yoo discloses a lock apparatus wherein the cam **9''** is mounted on the drive shaft **7'** for rotation (relative to rotating hinge member **100''**) therewith (Figure 3).

As to claim 13, Yoo discloses a lock apparatus wherein the lockable joint includes a cover **100'**, the lock indicator member **10'** has a first end configured to engage the knob **7** when the knob is moved axially toward the hinge members **100,100''** and a second end, the lock **8,10** is mounted on the lock indicator member near the second end for axial movement therewith, and the second end of the lock indicator member extends through an opening in the cover when the hinge members are unlocked (Figure 3).

As to claim 14, Yoo discloses a lock apparatus wherein the second end of the lock indicator member **10'** retracts into the cover **100'** when the hinge members **100,100''** are locked (Figure 3).

As to claim 15, Yoo discloses a lock apparatus wherein the lockable joint includes a spring **13** biasing the lock **8,10** toward the hinge members **100,100''** so that the second end of the lock indicator member **10'** retracts into the cover **100'** when the hinge members are locked (Figure 3).

As to claim 16, Yoo discloses a lock apparatus comprising first and second hinge members **100,100''** that, when locked, are prevented from rotating about an axis and that, when unlocked, are permitted to rotate about the axis, and a lock indicator member **10'** arranged to move between a retracted position when the hinge members are locked and an extended position when the hinge members are unlocked to allow a user to determine whether the hinge members are locked or unlocked by observing whether the lock indicator member is in the retracted position or the extended position (Figures 2-5).

As to claim 17, Yoo discloses a lock apparatus comprising a cover **100'**, wherein an end of the lock indicator member **10'** extends through an opening in the cover when the hinge members **100,100''** are unlocked (Figure 3).

As to claim 18, Yoo discloses a lock apparatus wherein the end of the lock indicator member **10'** retracts into the cover **100'** when the hinge members **100,100''** are locked (Figure 3).

As to claim 19, Yoo discloses a lock apparatus comprising a spring **13** biasing the lock indicator member **10'** toward the retracted position so that the end of the lock indicator member retracts into the cover **100'** when the hinge members **100,100''** are locked (Figure 3).

As to claim 20, Yoo discloses a lock apparatus wherein the lock indicator member **10'** is arranged to move along the axis (Figure 3).

As to claim 21, Yoo discloses a lock apparatus comprising a lock **8,10** movable between a locking position in which the hinge members **100,100''** are locked and a releasing position in which the hinge members are unlocked and a knob **7** rotatable (relative to rotating hinge member **100''**) about the axis and movable along the axis, wherein the lock is arranged to move from the locking position to the releasing position in response to movement of the knob axially toward the hinge members and then rotation of the knob about the axis, and the lock indicator member **10'** is arranged to move along the axis from the retracted position to the extended in response to movement of the knob (Figure 3).

As to claim 22, Yoo discloses a lock apparatus comprising a drive shaft **7'** rotatable (relative to rotating hinge member **100''**) about the axis, and wherein the hinge members **100,100''** are rotatably mounted on the drive shaft and the lock **8,10** is coupled to the drive shaft for axial movement toward and away from the hinge members, and the knob **7** is mounted on the drive shaft for rotation therewith (Figure 3).

As to claim 23, Yoo discloses a lock apparatus comprising a cam **9''** configured to move the lock **8,10** to the releasing position in response to movement of the knob **7** axially toward the hinge members **100,100''** and then rotation of the knob (relative to rotating hinge member **100''**) about the axis (Figure 3).

As to claim 24, Yoo discloses a lock apparatus wherein the cam 9'' is mounted on the drive shaft 7' for rotation (relative to rotating hinge member 100'') therewith (Figure 3).

Allowable Subject Matter

5. Claims 9 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

As to claim 9, Yoo discloses the claimed lock apparatus with the exception of wherein the lock is rotatably mounted on the drive shaft.

Absent the applicants' own disclosure, there would be no motivation to modify a lock apparatus as claimed by Yoo to have a lock rotatably mounted on the drive shaft.

Conclusion

The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure. The following patents show the state of the art with respect to lock apparatuses:

Sheng (US 5,620,272) and Huang (US 5,039,118) are cited for pertaining to apparatuses comprising a lock and a knob.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Ferguson whose telephone number is (571)272-7081. The examiner can normally be reached on M-F (8:00-5:00).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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